Emerald Ash Borer Threatens Wisconsin's Forests

Bill McNee, DNR Division of Forestry – Green Bay

The emerald ash borer, *Agrilus planipennis*, was first identified in the Detroit area in the summer of 2002, though scientists believe it arrived from Asia about a decade earlier in wood packing materials. Since its introduction, EAB has killed millions of ash trees in Lower Michigan, Indiana, Ohio, and Ontario. Last September, EAB was discovered at Brimley State Park in the Upper Peninsula of Michigan. Emerald ash borer has not been found in Wisconsin as of April 2006.

Forestry studies estimate that there are 717 million ash trees at risk in Wisconsin. Ash is an important member of both northern and southern forests, and is a major component of forests growing in wet areas. Ash is also a very common street and yard tree, comprising an estimated 30% of Wisconsin's street trees. Many of these ash were planted after Dutch Elm Disease killed urban elms in the 1960s and 1970s, and these ash trees are now at risk from another imported threat.

Emerald ash borer on leaf.

Dave Cappaert, Michigan State University, www.forestryimages.org

Emerald ash borer is very aggressive at attacking and killing all native ash species (*Fraxinus* spp.), and trees have little resistance. Larval tunneling cuts off the tree's food and water supply, and even healthy trees typically decline and die within a few years of infestation. Symptoms of EAB infestation include a declining canopy, epicormic sprouting, bark cracks covering larval galleries, and 1/8" D-shaped holes made by emerging adults. Adult beetles are dark green and approximately ½" in length, and are present from May to July.

To date, EAB detection efforts in Wisconsin have included visual surveys in campgrounds and in urban areas of southeast Wisconsin, and the preparation of 'detection trees' (girdled ash that attract adult EAB) in State Parks, State Forests and National Forests. Foresters are looking for symptoms of EAB infestation as they walk through forest lands, and city foresters and arborists are on alert in Wisconsin's urban areas. These efforts haven't found EAB, but it's inevitable that the pest will arrive here in the future if it isn't already here at a very low population level.

Currently, eradication efforts will call for removing all ash within ½ mile of any infested trees in an attempt to eliminate the pest from Wisconsin. Early detection will be a key factor in determining the success of such efforts. In parts of Michigan, removing infested and nearby ash has cost nearly $1 million per acre. Should EAB become established in Wisconsin, the ecological and economic costs will run into the billions of dollars.

Natural spread of EAB is currently thought to be between ½ to 2 miles per year. However, numerous 'outlier' populations have been established through the accidental transport of the

EAB galleries in firewood.

Troy Kimoto, Canadian Food Inspection Agency
www.forestryimages.org

insect in firewood, nursery stock, and unprocessed logs. Campgrounds and urban areas are thought to be at highest risk of EAB introduction due to accidental transport in firewood. Industries that use ash have taken steps to minimize the risk of additional EAB spread, but many people are unaware of the risks of transporting hitchhikers in firewood. Thus, public awareness is a major key to preventing the spread of EAB and other threats such as the gypsy moth, beech bark disease, oak wilt, and hemlock woolly adelgid.

As of April 1, 2006, out-of-state firewood can no longer be brought into Wisconsin's State Parks, Forests, and other state-owned properties. This restriction will reduce the risk of introducing EAB and other threats. These rules may be inconvenient for some visitors, but this is dwarfed by the impact that the introduction of EAB would have on Wisconsin's environment and economy. Beginning in June 2006, the Department of Agriculture, Trade and Consumer Protection will regulate the import of products that could spread infestations of emerald ash borer, Asian longhorned beetle, sudden oak death, and hemlock woolly adelgid.

For more information on emerald ash borer, visit dnr.wi.gov or emeraldashborer.info. The public can report suspected emerald ash borer adults or infestations by contacting the Department of Agriculture, Trade and Consumer Protection at 1-800-462-2803.